METHOD AND APPARATUS FOR UNINTERRUPTED PACKET TRANSFER USING REPLICATION OVER DISJOINT PATHS

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5 ABSTRACT

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A method of operating a fault tolerant connection in a network is described. The network includes a number of network elements and a number of links. Each of the network elements is coupled to at least one other of the network elements by at least one of the links. The method identifies a first path and a second path. The first path is between a first one of the network elements and a second one of the network elements, as is the second path. Moreover, the first path and the second path are disjoint. This disjointedness can be any difference between the two paths (e.g., any combination of different network elements or links). A packet is sent from the first one of the network elements via the first path, while a duplicate packet is sent from the first one of the network elements via the second path. The duplicate packet is a duplicate of the packet. Once these packets have been sent, at least one of the packet and the duplicate packet are received at the second one of the network elements. If both the packet and the duplicate packet are received at the second one of the network elements. If